Math-in-CTE

A Model of Enhanced Math Learning in Career and Technical Education



2009 Participants, Estee Williams & Gwen Barnett, Evansville Vanderburgh School Corporation

The Math-in-CTE model is a process and a pedagogy through which the math that naturally occurs in existing CTE curricula may be enhanced.

CTE teachers are not asked to replace their curriculum. Instead, CTE teachers work with math teacher partners to identify the intersection of CTE and math concepts. They then create math-enhanced CTE lessons using a seven-element model of curriculum development



2009 Participants, Annette Miles and Greg Dillion and Sylas Smith, Vigo County School Corporation

The Indiana State Department of Workforce
Development, along with The Indiana Department of
Education has partnered with the National Research
Center for Career & Technical Education to bring the
Math-in-CTE Model to Indiana Schools.

Here's What's Included:

- ·CTE teachers are paired with math teachers to form teams.
- •The CTE/math teams are provided staff development for training in Math and CTE curriculum integration.
- ·With the support of trainers during staff development, lessons are designed by the teams around math concepts already present in the CTE curricula.
- ·CTE teachers deliver the CTE math-enhanced lesson to students.

2009 was Indiana's first year of participation in Math-in-CTE. Teacher teams from around the state came together for 10 days of professional development. Our groups consisted of 7 Health Services teams and 7 Welding Teams. Many of these teacher participants, with the support of NRCcte, will be the facilitators for the 2010.

Funding Information:

The Indiana Department of Workforce Development through Carl D. Perkins Career and Technical Education funding, provides the location for training, national and state trainers, technical assistance, travel and accommodation costs, and teacher stipends.

Districts provide follow-up work days and payment for substitute teachers as needed.

Participants pay for their own continuing education credits.



NRC is the primary agent for generating scientifically based knowledge, dissemination, professional development, and technical assistance to improve (CTE) in the US



2009 Participants, Eric Cooper & Diane Steffey, J. Everett Light Career Center

Indiana & NRCCTE

Math-in-CTE? What's in it for me?

The most important benefit of participation in Math-in-CTE program is an increased understanding of math concepts for students.

The National Research Center has found that the Math-in-CTE program/process has helped increase standardized math test scores for students whose CTE teachers used mathenhanced lessons. That's a win for everyone –students, teachers and administrators! A summary of NRC's research study can be viewed at the following web address: http://tinyurl.com/y9oqkud

Interested?

Visit:

http://www.doe.in.gov/octe/currentevents.html

For more info and an online application

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Teacher Benefits

- ~ Freely exchange ideas in a shared community of practice with other teachers in your subject area around the state.
- ~ Gain more knowledge of the mathematics embedded in the CTE curricula.
- ~ Improve the education of your students NRC has found that the majority of math teachers who participate in the program take what they learn back to their classrooms too!
- ~ Earn graduate credit towards advanced degree
- ~ Participate in FUN professional development activity complete with planned activities, valuable door prizes, theme-based goodie bags, etc.
- ~ \$1,000 stipend for 10 days participation



2009 Participants, Kelly Graden & Laura Sibert, Four County Area Vocational Center, kept us all entertained with their creative use of our "Survivor" bandanas.

2010 Participation Guidelines

4 Target Program Areas:
Automotive Services
Health Services
Agricultural Education
Building Trades

- 1. Teams consist of one math and one CTE teacher from the same district/building.
- 2. Teams will attend 10 days of training:5 days July 12-16, 2010, Indianapolis2 days Fall, 20102 days Winter/Spring, 20111 day Late Spring, 2011
- 3. Periodic common planning time must be made available for participants in their home district for school year 2010-2011.
- 4. Participants will be expected to assume leadership roles in the future for the purpose of spreading the practices.



